What is claimed is:

1. A display device comprising:

a pair of substrates disposed opposite to each other, at least one of which is transparent;

a plurality of particles electrostatically charged to have a same polarity and contained in a gaseous phase provided between the pair of substrates;

first and second electrodes provided for each of pixels arranged in a matrix for driving the particles; and

a voltage applying portion for applying voltage to the first and second electrodes in accordance with an image signal, wherein

when voltage is applied to the first and second electrodes by the voltage applying portion, the particles are caused to travel between the first and second electrodes in accordance with the voltage applied so as to display an image corresponding to the image signal.

2. The display device in accordance with claim 1, wherein the first and second electrodes are formed at one of the substrates.

3. The display device in accordance with claim 2, wherein the first and second electrodes are formed at one of the substrates which is transparent, one of the first and second

electrodes being transparent.

4. The display device in accordance with claim 1, wherein the first and second electrodes are formed at respective of the substrates.

5. The display device in accordance with claim 1, wherein at least one of the first and second electrodes is formed as depressed or projecting in a direction perpendicular to the substrates.

6. The display device in accordance with claim 1, wherein the first electrode or the second electrode is formed at one of the substrates as projecting in a direction perpendicular to the substrates, the projecting one of the electrodes retaining a gap between the substrates.

7. The display device in accordance with claim 1, wherein the first electrode or the second electrode is formed at one of the substrates as projecting in a direction perpendicular the substrates, the projecting one of the electrodes separating one or plural pixels from other pixels.

8. The display device in accordance with claim 1, wherein at least one of the first and second electrodes comprises a transparent electrical conductor.

9. The display device in accordance with claim 1, further comprising a third electrode provided for each of the pixels arranged in the matrix for driving the particles, the third electrode being configured so as to be applied with voltage in accordance with the image signal by the voltage applying portion, wherein:

the first and second electrodes are each a comb-shaped electrode having plural comb tooth portions formed from a transparent electrical conductor, the comb tooth portions of the first electrode and the comb tooth portions of the second electrode being arranged to mesh with each other; and

when voltage is applied to the first, second and third electrodes by the voltage applying portion, the particles are caused to travel between the first, second and third electrodes in accordance with the voltage applied so as to display an image corresponding to the image signal.

10. The display device in accordance with claim 9, wherein a comb tooth portion of the first electrode and a comb tooth portion of the second electrode which are positioned adjacent to each other define therebetween a spacing not less than 3 μm and not more than 5 μm.

11. The display device in accordance with claim 9,

wherein the voltage applying portion is configured to alternately apply voltages of different polarities to the first and second electrodes.

12. The display device in accordance with claim 1, wherein the particles have a particle diameter not less than 1 μm and not more than 10 μm.

13. The display device in accordance with claim 1, wherein each of the pixels is provided with an active element configured to be on/off controlled to apply voltage to the first electrode or the second electrode pixel by pixel.

14. The display device in accordance with claim 13, wherein the active element comprises an organic semiconductor layer.

15. The display device in accordance with claim 1, which has a passive-matrix drive configuration.

16. The display device in accordance with claim 1, wherein the substrates each comprise a resin film having a thickness not less than 0.1 mm and not more than 0.5 mm.

17. A display device comprising:

a pair of substrates disposed opposite to each other,

at least one of which is transparent;

a plurality of electrostatically-charged particles contained in a gaseous phase provided between the pair of substrates;

first and second electrodes provided for each of pixels arranged in a matrix;

a colored surface located adjacent the first electrode or the second electrode, the colored surface showing a color different from a color of the particles;

a lens formed at on one of the substrates for condensing or scattering light passing through the gaseous phase from outside of the substrates so as to illuminate the colored surface with condensed or scattered light;

a voltage applying portion for applying voltage to the first and second electrodes in accordance with an image signal, wherein

when voltage is applied to the first and second electrodes by the voltage applying portion, the particles are caused to travel between the first and second electrodes in accordance with the voltage applied so as to display an image corresponding to the image signal.

18. The display device in accordance with claim 17, wherein:

each of the pixel is capable of providing display

including at least first and second display states;

in the first display state the colored surface is covered with the particles having traveled in accordance with voltage applied across the first and second electrodes; and

in the second display state the colored surface is exposed by the particles having traveled in accordance with voltage applied across the first and second electrodes.

19. The display device in accordance with claim 17, wherein the lens is formed at a first one of the substrates which is transparent, while the first and second electrodes formed at a second one of the substrates which is opposite to the second substrate.

20. The display device in accordance with claim 17, which has an active-matrix drive configuration.

21. The display device in accordance with claim 17, which has a passive-matrix drive configuration.

22. The display device in accordance with claim 19, wherein the second substrate has an uneven surface on a gaseous phase side, the second electrode being located at a depressed portion of the uneven surface of the second substrate, the first electrode and the colored surface being located at a projecting

portion of the uneven surface of the second substrate.

23. The display device in accordance with claim 22, wherein:

the projecting portion of the uneven surface of the second substrate is formed into a matrix pattern, while the depressed portion of the uneven surface is formed into a lattice pattern circumscribing the projecting portion; and

the second electrode is comb-shaped and located at the depressed portion.

24. The display device in accordance with claim 22, wherein:

the projecting portion of the uneven surface of the second substrate has a top portion reaching the first substrate; and

the first electrode and the colored surface are located at a surface of the projecting portion excluding the top portion.

25. The display device in accordance with claim 19, wherein the lens formed at the first substrate has a concave curved surface.

26. The display device in accordance with claim 22,

wherein the colored surface is located at a surface of the projecting portion, while the first electrode comprises a transparent electrical conductor and is located at the colored surface.

27. The display device in accordance with claim 22, wherein the first electrode comprises a transparent or opaque electrical conductor and is located at a surface of the projecting portion, while the colored surface is located at a surface of the first electrode.

28. The display device in accordance with claim 17, wherein the particles have a particle diameter not less than 1 μm and not more than 10 μm.

29. The display device in accordance with claim 17, wherein the first and second substrates each comprise a resin substrate having a thickness not more than 0.5 mm.

30. The display device in accordance with claim 20, wherein the first electrode or the second electrode is connected to an active element used in the active-matrix drive configuration for active-matrix drive, the active element comprising an organic semiconductor layer.

31. A display device comprising:

a pair of substrates disposed opposite to each other, at least one of which is transparent;

a plurality of particles having an electrostatic property contained in a gaseous phase provided between the pair of substrates;

first, second and third electrodes provided for each of pixels arranged in a matrix for driving the particles; and

a voltage applying portion for applying voltage to the first, second and third electrodes in accordance with an image signal, wherein:

the first electrode and the second electrode are disposed at one of the substrates, while the third electrode disposed at the other substrate; and

when voltage is applied to the first, second and third electrodes by the voltage applying portion, the particles are caused to travel between the first, second and third electrodes in accordance with the voltage applied so as to display an image corresponding to the image signal.

32. A display device comprising:

a pair of substrates disposed opposite to each other, at least one of which is transparent;

a plurality of particles having an electrostatic property contained in a gaseous phase provided between the pair

of substrates;

first and second electrodes provided for each of pixels arranged in a matrix for driving the particles; and

a voltage applying portion for applying voltage to the first and second electrodes in accordance with an image signal, wherein:

the first electrode and the second electrode are disposed to have a spacing therebetween which varies for every three or more adjacent pixels; and

when voltage is applied to the first and second electrodes by the voltage applying portion, the particles are caused to travel between the first and second electrodes in accordance with the voltage applied so as to display an image corresponding to the image signal in display units each consisting of three or more adjacent pixels.

33. A display device comprising:

a pair of substrates disposed opposite to each other, at least one of which is transparent;

a plurality of particles having an electrostatic property contained in a gaseous phase provided between the pair of substrates;

first and second electrodes provided for each of pixels arranged in a matrix for driving the particles; and

a voltage applying portion for applying voltage to the

first and second electrodes in accordance with an image signal, wherein:

the first electrode and the second electrode have respective widths which vary for every three or more adjacent pixels; and

when voltage is applied to the first and second electrodes by the voltage applying portion, the particles are caused to travel between the first and second electrodes in accordance with the voltage applied so as to display an image corresponding to the image signal in display units each consisting of three or more adjacent pixels.

34. A display device comprising:

a pair of substrates disposed opposite to each other, at least one of which is transparent;

a plurality of particles having an electrostatic property contained in a gaseous phase provided between the pair of substrates;

first and second electrodes provided for each of pixels arranged in a matrix for driving the particles; and

a voltage applying portion for applying voltage to the first and second electrodes in accordance with an image signal, wherein:

the particles have an average particle diameter which varies for every three or more adjacent pixels; and

when voltage is applied to the first and second electrodes by the voltage applying portion, the particles are caused to travel between the first and second electrodes in accordance with the voltage applied so as to display an image corresponding to the image signal in display units each consisting of three or more adjacent pixels.

35. The display device in accordance with claim 34, wherein the plurality of particles have an average particle diameter not less than 1 μm and not more than 10 μm.

36. The display device in accordance with claim 31, wherein the plurality of particles comprise three groups of particles which are colored red, green and blue, respectively, the three groups of particles being encapsulated in respective spaces that are separated from one another with partition wall pixel by pixel.

37. The display device in accordance with claim 31, wherein the plurality of particles comprise three groups of particles which are colored cyan, magenta and yellow, respectively, the three groups of particles being encapsulated in respective spaces that are separated from one another with partition wall pixel by pixel.

38. The display device in accordance with claim 31,

which has an active-matrix drive configuration.

39. The display device in accordance with claim 38, wherein the second electrode is connected to an active element used in the active-matrix drive configuration for active-matrix drive, the active element comprising an organic semiconductor layer.

40. The display device in accordance with claim 31, which has a passive-matrix drive configuration.

41. The display device in accordance with claim 31, wherein the substrates each comprise a resin substrate having a thickness not more than 0.5 mm.

42. A display device comprising:

a pair of substrates disposed opposite to each other, at least one of which is transparent;

a plurality of particles having an electrostatic property contained in a gaseous phase provided between the pair of substrates;

first and second electrodes provided for each of pixels arranged in a matrix for driving the particles; and

a voltage applying portion for applying voltage to the first and second electrodes in accordance with an image signal,

wherein:

the particles each comprise a parent particle as a core, and plural child particles fixed to the parent particle in a manner to cover a substantially entire surface of the parent particle; and

when voltage is applied to the first and second electrodes by the voltage applying portion, the particles are caused to travel between the first and second electrodes in accordance with the voltage applied so as to display an image corresponding to the image signal.

43. The display device in accordance with claim 42, wherein the plurality of particles comprise two kinds of particles which are electrostatically charged to have different polarities, at least one of the two kinds of particles comprising a parent particle as a core, and plural child particles fixed to the parent particle in a manner to cover a substantially entire surface of the parent particle.

44. A display device comprising:

a pair of substrates disposed opposite to each other, at least one of which is transparent;

a plurality of particles having an electrostatic property contained in a gaseous phase provided between the pair of substrates;

first and second electrodes provided for each of pixels arranged in a matrix for driving the particles; and

a voltage applying portion for applying voltage to the first and second electrodes in accordance with an image signal, wherein:

the particles each comprise a parent particle as a core, a first coating layer coating an entire surface of the parent particle and comprising a material having a higher softening point than that of the parent particle, a second coating layer coating an entire surface of the first coating layer and comprising the same material as that of the parent particle or a material having a lower softening point than that of the parent particle, and plural child particles fixed to the second coating layer in a manner to cover a substantially entire surface of the second coating layer; and

when voltage is applied to the first and second electrodes by the voltage applying portion, the particles are caused to travel between the first and second electrodes in accordance with the voltage applied so as to display an image corresponding to the image signal.

45. The display device in accordance with claim 42, wherein the parent particle has a smaller specific gravity and a lower softening point than the child particles.

46. The display device in accordance with claim 42, wherein the parent particle is porous.

47. The display device in accordance with claim 42, wherein the parent particle has a hollow structure.

48. The display device in accordance with claim 42, wherein either or both of the parent particle and the child particles are spherical.

49. The display device in accordance with claim 42, wherein the child particles each comprise a fine particle of silica surface-treated to have an electrostatic property.

50. The display device in accordance with claim 42, wherein the child particles are colored particles.

51. The display device in accordance with claim 42, wherein the plurality of particles each have a surface formed with a water-repellent film or a hydrophobic film.

52. The display device in accordance with claim 42, wherein the child particles are wet-milled by a mill using a milling medium to be stirred, the mill being loaded with a surface-treating agent and beads as the milling medium.

53. The display device in accordance with claim 42, wherein the child particles are titanium oxide particles having an average particle diameter not less than 200 nm and not more than 400 nm.

54. The display device in accordance with claim 43, wherein one of the two kinds of particles comprises black particles and negatively charged child particles are adhering to the black particles exclusively.

55. The display device in accordance with claim 42, wherein the child particles are silica particles having an average particle diameter not less than 10 nm and not more than 20 nm.

56. The display device in accordance with claim 42, wherein the weight ratio of parent particles:child particles blended for the child particles to cover the substantially entire surface of the parent ranges from 100:3 to 100:5.

57. A display device comprising:

a pair of substrates disposed opposite to each other, at least one of which is transparent;

a plurality of particles having an electrostatic property contained in a gaseous phase provided between the pair

of substrates;

first and second electrodes provided for each of pixels arranged in a matrix for driving the particles; and

a voltage applying portion for applying voltage to the first and second electrodes in accordance with an image signal, wherein:

the particles each comprise a parent particle as a core, a first coating layer coating an entire surface of the parent particle and comprising an opaque material which does not allow light to pass therethrough, and a second coating layer coating an entire surface of the first coating layer and comprising an insulating material; and

when voltage is applied to the first and second electrodes by the voltage applying portion, the particles are caused to travel between the first and second electrodes in accordance with the voltage applied so as to display an image corresponding to the image signal.

58. A method of preparing particles for use in image display of a display device, the display device including: a pair of substrates disposed opposite to each other, at least one of which is transparent; first and second electrodes provided for each of pixels arranged in a matrix; and a voltage applying portion for applying voltage to the first and second electrodes in accordance with an image signal, wherein: the particles each

comprise a parent particle as a core, and plural child particles fixed to the parent particle in a manner to cover a substantially entire surface of the parent particle; and when voltage is applied to the first and second electrodes by the voltage applying portion, the particles are caused to travel in a gaseous phase provided between the first and second electrodes in accordance with the voltage applied,

the method comprising the steps of:

allowing polymer particles dispersed in an aqueous medium not containing a swelling agent to absorb a monomer and an oil-soluble dye; and

polymerizing the monomer absorbed by the polymer particles to obtain monodisperse particles each serving as the parent particle.